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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,376	11/16/2006	Timothy J. Mousley	GB 030205	9086
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EXAMINER				
DEAN, RAYMOND S				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/554,376

Applicant(s)

MOULSLEY ET AL.

Examiner

RAYMOND S. DEAN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 1 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's amendments filed October 19, 2009 with respect to the rejection(s) the independent claims under 35 U.S.C. 112 1st Paragraph have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of prior art Lieshout et al. (US 2002/0094833)

Lieshout, which also teaches downlink power control in a WCDMA system, teaches measurement means for measuring a parameter of a portion of the received first downlink signal, where the portion of the received first downlink signal is modulated with only non-predetermined data values and no pilot data values (Sections 0030, 0043 – 0044, the common transport channel such as an RACH or FACH carries signals that carry data that is not pilot data, said data effectively modulates the said signal and thus is the non-predetermined data values); transmitter means for transmitting power control commands generated by the mobile station in response to the measured parameter (Sections 0043, 0044, the power on the downlink is adjusted based on the UE measurement information that is sent from the UE on the uplink thus said UE measurement information is effectively the power control commands), wherein the power control commands are transmitted based on a predetermined error rate (Sections 0043, 0044).

Claim Objections

2. Claims 1, 9 are objected to because of the following informalities: Applicants claim "wherein determination of **which** power control commands to transmit is based on a predetermined error rate". The word "which" is no longer needed because there is just one set of power control commands. All claims that depend from Claims 1 and 9 are objected to for the same reasons set forth above. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 3, 10, 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2, 10, recite the limitation "**the** second downlink signal" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 3, 11 recite the limitation "**the** second power control commands" in the last line. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4, 5, 9, 10, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. (US 2002/0077141) in view of Lieshout et al. (US 2002/0094833)

Regarding Claim 1, Hwang teaches a mobile station for use in a communication system having a base station (Figure 4, mobile station (UE, 411), base station (NODE B1, 401 or NODE B2, 403), the mobile station comprising: receiver means for receiving from the base station a first downlink signal (Figures 1B, 6, Sections 0007, 0152 lines 1 – 3, 0153, 0154, the downlink dedicated channel (DL_DCH) comprises the downlink signal).

Hwang does not teach measurement means for measuring a parameter of a portion of the received first downlink signal, where the portion of the received first downlink signal is modulated with only non-predetermined data values and no pilot data values; transmitter means for transmitting power control commands generated by the mobile station in response to the measured parameter, wherein the power control commands are transmitted based on a predetermined error rate

Lieshout, which also teaches downlink power control in a WCDMA system, teaches measurement means for measuring a parameter of a portion of the received first downlink signal, where the portion of the received first downlink signal is modulated with only non-predetermined data values and no pilot data values (Sections 0030, 0043 – 0044, the common transport channel such as an RACH or FACH carries signals that

carry data that is not pilot data, said data effectively modulates the said signal and thus is the non-predetermined data values); transmitter means for transmitting power control commands generated by the mobile station in response to the measured parameter (Sections 0043, 0044, the power on the downlink is adjusted based on the UE measurement information that is sent from the UE on the uplink thus said UE measurement information is effectively the power control commands), wherein the power control commands are transmitted based on a predetermined error rate (Sections 0043, 0044).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the above power control features of Lieshout as an alternative means for achieving the predictable result of downlink power control in a WCDMA system.

Regarding Claim 9, Hwang teaches a method of operating a communication system comprising a base station and at least one mobile station (Figure 4, mobile station (UE, 411), base station (NODE B1, 401 or NODE B2, 403), the method comprising: receiving from the base station a first downlink signal via a receiver means (Figures 1B, 6, Sections 0007, 0152 lines 1 – 3, 0153, 0154, the downlink dedicated channel (DL_DCH) comprises the downlink signal).

Hwang does not teach measuring a parameter of a portion of the received first downlink signal via a measurement means, where the portion of the received first downlink signal is modulated with only non-predetermined data values and no pilot data values; and transmitting power control commands generated by the mobile station in

response to the measured parameter, wherein the power control commands are transmitted based on a predetermined error rate

Lieshout, which also teaches downlink power control in a WCDMA system, teaches measuring a parameter of a portion of the received first downlink signal via a measurement means, where the portion of the received first downlink signal is modulated with only non-predetermined data values and no pilot data values (Sections 0030, 0043 – 0044, the common transport channel such as an RACH or FACH carries signals that carry data that is not pilot data, said data effectively modulates the said signal and thus is the non-predetermined data values); and transmitting power control commands generated by the mobile station in response to the measured parameter (Sections 0043, 0044, the power on the downlink is adjusted based on the UE measurement information that is sent from the UE on the uplink thus said UE measurement information is effectively the power control commands), wherein the power control commands are transmitted based on a predetermined error rate (Sections 0043, 0044).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the above power control features of Lieshout as an alternative means for achieving the predictable result of downlink power control in a WCDMA system.

Regarding Claims 2, 10, Hwang in view of Lieshout teaches all of the claimed limitations recited in Claims 1, 9. Hwang further teaches wherein the receiver means is adapted to receive from the base station a second, non-power controlled downlink

signal and to derive a channel estimate from a second downlink signal, and to employ the channel estimate to decode the first downlink signal (Section 0156 lines 7 – 14, the channel estimation provides phase shift information about the downlink signal which can aid in decoding said signal, the common pilot signal is used in order provide channel estimation, which leads to TPC generation, in order for said channel estimation and said TPC generation to occur said common pilot signal will need to be at a constant power level thus non-power controlled).

Regarding Claims 4, 12, Hwang in view of Lieshout teaches all of the claimed limitations recited in Claims 1, 9. Hwang further teaches a radio communication system comprising a base station (100) and at least one mobile station/a plurality of mobile stations (Figure 4, Hwang teaches a WCDMA system, typical WCDMA systems comprise a plurality of mobile stations and base stations).

Regarding Claim 5, Hwang in view of Lieshout teaches all of the claimed limitations recited in Claim 4. Lieshout further teaches the base station comprising a receiver means for receiving the first power control commands (Section 0044); a transmitter means for transmitting the first downlink signal modulated with non-predetermined data values and subjected to transmit power control in accordance with the first transmit power control commands (Sections 0016, 0043, 0044).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAYMOND S. DEAN whose telephone number is (571)272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Raymond S Dean/
Examiner, Art Unit 2618
Raymond S. Dean
December 17, 2009